Title (en)

OUTPUT IMPEDANCE MATCHING CIRCUIT FOR RF AMPLIFIER DEVICES, AND METHODS OF MANUFACTURE THEREOF

Title (de)

AUSGANGSIMPEDANZANPASSUNGSSCHALTUNG FÜR HF-VERSTÄRKERVORRICHTUNGEN UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

CIRCUIT D'ADAPTATION D'IMPÉDANCE DE SORTIE POUR DISPOSITIFS D'AMPLIFICATEURS RF ET SES PROCÉDÉS DE FABRICATION

Publication

EP 3160043 A1 20170426 (EN)

Application

EP 16195003 A 20161021

Priority

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Abstract (en)

A packaged RF amplifier device includes a transistor and an output circuit. The transistor includes a control terminal and first and second current carrying terminals. The output circuit is coupled between the first current carrying terminal and an output lead. The output circuit includes first and second inductive elements coupled in series. The first inductive element, which may be a first bondwire array or an integrated inductance, is coupled between the first current carrying terminal and a node. The second inductive element, which includes a second bondwire array, is coupled between the node and the output lead. The device also includes a shunt circuit with a shunt capacitor and a third bondwire array coupled between the first current carrying terminal and the shunt capacitor. The first and second inductive elements and the third bondwire array are configured to have a desired mutual inductance.

IPC 8 full level

H03F 1/56 (2006.01); **H01L 23/64** (2006.01); **H01L 23/66** (2006.01); **H03F 3/195** (2006.01)

CPC (source: CN EP US)

H01L 23/49562 (2013.01 - US); **H01L 23/49589** (2013.01 - US); **H01L 23/5227** (2013.01 - EP US); **H01L 23/528** (2013.01 - US); **H01L 23/645** (2013.01 - CN EP US); **H01L 23/66** (2013.01 - EP US); **H01L 24/49** (2013.01 - EP US); **H01L 24/85** (2013.01 - EP US); **H01L 25/16** (2013.01 - CN); **H03F 1/565** (2013.01 - CN EP US); **H03F 3/19** (2013.01 - CN US); **H03F 3/195** (2013.01 - EP US); H01L 24/48 (2013.01 - EP US); H01L 2223/6611 (2013.01 - EP US); H01L 2223/6655 (2013.01 - EP US); H01L 2223/6672 (2013.01 - US); H01L 2224/04042 (2013.01 - EP US); H01L 2224/05552 (2013.01 - EP US); H01L 2224/05553 (2013.01 - EP US); H01L 2224/291 (2013.01 - EP US); H01L 2224/2919 (2013.01 - EP US); H01L 2224/32245 (2013.01 - EP US); H01L 2224/48091 (2013.01 - EP US); H01L 2224/48106 (2013.01 - US); H01L 2224/48137 (2013.01 - EP US); H01L 2224/48195 (2013.01 - EP US); H01L 2224/48247 (2013.01 - EP US); H01L 2224/48265 (2013.01 - US); H01L 2224/49052 (2013.01 - EP US); H01L 2224/49113 (2013.01 - EP US); H01L 2224/49175 (2013.01 - EP US); H01L 2224/73265 (2013.01 - EP US); H01L 2224/83805 (2013.01 - EP US); H01L 2224/8384 (2013.01 - EP US); H01L 2924/00014 (2013.01 - EP US); H01L 2924/1304 (2013.01 - EP US); H01L 2924/1305 (2013.01 - EP US); H01L 2924/13091 (2013.01 - EP US); H01L 2924/1421 (2013.01 - EP US); H01L 2924/19011 (2013.01 - EP US); H01L 2924/19041 (2013.01 - EP US); H01L 2924/19042 (2013.01 - EP US); H01L 2924/19105 (2013.01 - EP US); H01L 2924/19107 (2013.01 - EP US); H01L 2924/30107 (2013.01 - EP US); H03F 2200/222 (2013.01 - EP US); H03F 2200/387 (2013.01 - EP US); H03F 2200/391 (2013.01 - EP US); H03F 2200/402 (2013.01 - EP US); H03F 2200/451 (2013.01 - EP US); H03F 2200/75 (2013.01 - EP US); H03F 2203/21103 (2013.01 - EP US); H03F 2203/21139 (2013.01 - EP US)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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